

United States District Court

EASTERN DISTRICT OF TEXAS

SHERMAN DIVISION

IMPERIUM IP HOLDINGS (CAYMAN),
LTD.

V.

SAMSUNG ELECTRONICS CO., LTD.,
SAMSUNG ELECTRONICS AMERICA,
INC., SAMSUNG
TELECOMMUNICATIONS AMERICA,
LLC, and SAMSUNG SEMICONDUCTOR,
INC.

Civil Action No. 4:14-CV-00371

Judge Mazzant

MEMORANDUM OPINION AND ORDER

Pending before the Court is Defendants' Rule 50(b) Motion for Judgment as a Matter of Law and/or Rule 59 Motion for a New Trial (Dkt. #337). After reviewing the relevant pleadings, the Court denies Defendants' motion.

BACKGROUND

On June 9, 2014, Plaintiff filed the instant action against Defendants, alleging infringement of United States Patent Nos. 6,271,884 (the “’884 Patent”), 7,092,029 (the “’029 Patent”), and 6,836,290 (the “’290 Patent”). On February 8, 2016, the jury returned a verdict in favor of Plaintiff. Particularly, the jury found the following: (1) Defendants infringed Claims 1, 5, 14, and 17 of the ’884 Patent; (2) Defendants infringed Claims 1, 6, and 7 of the ’029 Patent; (3) Defendants willfully infringed the patents-in-suit; and (4) Claim 10 of the ’290 Patent was invalid for obviousness (Dkt. #253). The jury awarded \$4,840,772 in damages for infringement of the ’884 Patent and \$2,129,608.50 in damages for infringement of the ’029 Patent (Dkt. #253). On August 24, 2016, the Court awarded enhanced damages for willful infringement and entered final judgment (Dkt. #329; Dkt. #330).

On September 21, 2016, Defendants filed their renewed motion for judgment as a matter of law (Dkt. #337). On October 11, 2016, Plaintiff filed a response (Dkt. #341). On October 24, 2016, Defendants filed a reply (Dkt. #343). On November 3, 2016, Defendants filed a sur-reply (Dkt. #346).

LEGAL STANDARDS

Judgment as a Matter of Law

Upon a party's renewed motion for judgment as a matter of law following a jury verdict, the Court should properly ask whether "the state of proof is such that reasonable and impartial minds could reach the conclusion the jury expressed in its verdict." Fed. R. Civ. P. 50(b); *see also Am. Home Assurance Co. v. United Space All.*, 378 F.3d 482, 487 (5th Cir. 2004). "The grant or denial of a motion for judgment as a matter of law is a procedural issue not unique to patent law, reviewed under the law of the regional circuit in which the appeal from the district court would usually lie." *Finisar Corp. v. DirectTV Grp., Inc.*, 523 F.3d 1323, 1332 (Fed. Cir. 2008). "A JMOL may only be granted when, 'viewing the evidence in the light most favorable to the verdict, the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable jurors could not arrive at any contrary conclusion.'" *Versata Software, Inc. v. SAP Am., Inc.*, 717 F.3d 1255, 1261 (Fed. Cir. 2013) (quoting *Dresser-Rand Co. v. Virtual Automation, Inc.*, 361 F.3d 831, 838 (5th Cir. 2004)).

Under Fifth Circuit law, a court should be "especially deferential" to a jury's verdict and must not reverse the jury's findings unless they are not supported by substantial evidence. *Baisden v. I'm Ready Prods., Inc.*, 693 F.3d 491, 499 (5th Cir. 2012). "Substantial evidence is defined as evidence of such quality and weight that reasonable and fair-minded men in the exercise of impartial judgment might reach different conclusions." *Threlkeld v. Total Petroleum*,

Inc., 211 F.3d 887, 891 (5th Cir. 2000). A motion for judgment as a matter of law must be denied “unless the facts and inferences point so strongly and overwhelming in the movant’s favor that reasonable jurors could not reach a contrary conclusion.” *Baisden*, 693 F.3d at 498 (citation omitted). However, “[t]here must be more than a mere scintilla of evidence in the record to prevent judgment as a matter of law in favor of the movant.” *Arismendez v. Nightingale Home Health Care, Inc.*, 493 F.3d 602, 606 (5th Cir. 2007).

In evaluating a motion for judgment as a matter of law, a court must “draw all reasonable inferences in the light most favorable to the verdict and cannot substitute other inferences that [the court] might regard as more reasonable.” *E.E.O.C. v. Boh Bros. Constr. Co.*, 731 F.3d 444, 451 (5th Cir. 2013) (citation omitted). However, “[c]redibility determinations, the weighing of evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000). “[T]he court should give credence to the evidence favoring the nonmovant as well as that ‘evidence supporting the moving party that is uncontradicted and unimpeached, at least to the extent that the evidence comes from disinterested witnesses.’” *Id.* at 151 (citation omitted).

Motion for a New Trial

Under Federal Rule of Civil Procedure 59, a new trial may be granted to any party to a jury trial on any or all issues “for any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59. In considering a motion for a new trial, the Federal Circuit applies the law of the regional circuit. *z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1347 (Fed. Cir. 2007). “A new trial may be granted, for example, if the district court finds the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling*

Co., 773 F.2d 610, 612–13 (5th Cir. 1985). “The decision to grant or deny a motion for a new trial is within the discretion of the trial court and will not be disturbed absent an abuse of discretion or a misapprehension of the law.” *Prytania Park Hotel, Ltd. v. Gen. Star Indem. Co.*, 179 F.3d 169, 173 (5th Cir. 1999).

ANALYSIS

I. Judgment as a Matter of Law

Defendants move for judgment as a matter of law on the issues of infringement, validity of the ’884 Patent and the ’029 Patent, and damages. Defendants argue the evidence presented at trial was legally insufficient to support the jury’s verdict.

A. Direct Infringement

To prove infringement of an asserted patent claim under 35 U.S.C. § 271, a plaintiff must show the presence of every element, or its equivalent, in the accused product or service. *Lemelson v. United States*, 752 F.2d 1538, 1551 (Fed. Cir. 1985). First, the Court construes the asserted claim to determine its scope and meaning; and second, the construed claim must be compared to the accused device or service. *Absolute Software, Inc. v. Stealth Signal, Inc.*, 659 F.3d 1121, 1129 (Fed. Cir. 2011) (citing *Carroll Touch, Inc. v. Electro Mech. Sys., Inc.*, 15 F.3d 1573, 1576 (Fed. Cir. 1993)). “A determination of infringement is a question of fact that is reviewed for substantial evidence when tried to a jury.” *ACCO Brands, Inc. v. ABA Locks Mfr. Co.*, 501 F.3d 1307, 1311 (Fed. Cir. 2007).

1. Infringement of the ’290 Patent

Defendants claim to be entitled to a judgment of non-infringement as a matter of law for the ’290 Patent. Defendants contend that Plaintiff and its infringement expert, Dr. Cameron Wright, failed to do the following at trial: (1) identify each of the accused products for the ’290

Patent; (2) establish that the Samsung Galaxy S5 (“Galaxy S5”) is a representative product for all products accused of infringing the ’290 Patent; (3) identify the documents (and portions of these documents) relied upon to show infringement for all products accused of infringing the ’290 Patent; (4) identify the portions of deposition testimony that Dr. Wright relied on to establish infringement of the ’290 Patent; (5) establish that the accused products actually practice the MIPI standard (Dkt. #337 at p. 3).

The Court disagrees with Defendants’ arguments and determines substantial evidence supports the jury’s verdict finding of infringement. At trial, Dr. Wright asserted that Defendants’ products contain every limitation of Claim 10 in the ’290 Patent (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 99:10–16). Specifically, Dr. Wright testified that Defendants infringe this claim with two models of computers, five models of tablets, and sixteen phone models, totaling twenty-three accused products (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 87:21–88:2). Dr. Wright then stated:

[T]hese are a lot of models here, a lot of individual models. We can’t walk through every one, so I’ve chosen as one example product, one representative, and since they all infringe in the same way, I can – I can walk through that product and you can apply it to the others.

(Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 88:5–9). As such, Dr. Wright chose the Galaxy S5 as a representative product for his infringement opinion. Defendants maintain that Dr. Wright improperly used the Galaxy S5 as a representative product without meeting Plaintiff’s burden of establishing how the other accused products function and operate in the same way (Dkt. #337 at p. 4). Defendants are incorrect. In *TiVo, Inc. v. EchoStar Commc’ns Corp.*, the Federal Circuit noted, “[T]here is nothing improper about an expert testifying in detail about a particular device and then stating that the same analysis applies to other allegedly infringing devices that operate similarly, without discussing each type of device in detail.” 516 F.3d 1290, 1308 (Fed. Cir.

2008). Dr. Wright testified that he reviewed documentation related to the accused products and concluded that the Galaxy S5 and the remaining accused products employ the same interface and infringe in basically the same way (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 88:12–14; Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 97:20–99:16). Defendants were free to cross-examine Dr. Wright on this testimony, but they did not. The Court finds that Dr. Wright was justified in using the Galaxy S5 as a representative product for the other accused products in his infringement analysis.

To prove infringement, Dr. Wright walked through the elements of Claim 10 and explained how the Galaxy S5 infringes each and every element (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 88:3–97:19). Dr. Wright testified that he examined a large body of evidence that included interrogatory responses, documents, depositions, and source code to support his opinion (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 84:14–19). Defendants contest Dr. Wright’s testimony because he did not present the jury with every piece of data supporting his opinion. Rule 705 of the Federal Rules of Evidence allows an expert to offer an opinion without disclosing the underlying facts or data making up such opinion. Fed. R. Evid. 705. “The expert may in any event be required to disclose the underlying facts or data on cross-examination.” *Id.* Here, Dr. Wright presented the jury with some of the documentary evidence that formed his opinion (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 89:18–19, 90:6–10 (introducing a Galaxy S5 datasheet for image processing that shows the Galaxy S5 used a CMOS image sensor); Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 91:1–7 (referring to a user guide for Defendants’ interface)). Defendants had the opportunity to cross-examine him about the factual underpinnings of this opinion. *See Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 596 (1993) (“Vigorous cross-examination, presentation of contrary evidence, and careful instruction on the burden of proof

are the traditional and appropriate means of attacking shaky but admissible evidence.” (citing *Rock v. Arkansas*, 483 U.S. 44, 61 (1987))). Nevertheless, whether Defendants used that opportunity effectively goes to the weight of the proffered testimony rather than its admissibility. “Determining the weight and credibility of the evidence is the special province of the trier of fact.” *Inwood Labs., Inc. v. Ives Labs., Inc.*, 456 U.S. 844, 856 (1982).

Defendants finally assert that Plaintiff has not shown that Defendants’ accused products meet the Court’s claim construction. The Court construed “an image processor connected to the CMOS image sensor to receive the signals output by the data interface circuit” of Claim 10 to mean “a processor connected to the CMOS image sensor for processing image data received from the single-ended and differential interfaces” (Dkt. #105 at p. 18). Defendants contend that their products use the MIPI CSI-2 standard, which transmits and receives signals using only the differential interface. Because the accused products never receive image data over the single-ended interface, Defendants claim that their products do not meet the claim limitation under the Court’s construction. Defendants’ arguments are contrary to the Court’s construction and are rejected. In construing Claim 10, the Court did not require both the single-ended and differential interfaces to receive image data. Rather, the image processor should process image data received from the single-ended and differential interfaces. The parties agree that differential interfaces transmit image data, but they dispute whether control signals, transmitted by Defendants’ single-ended interface, are image data. Plaintiff put forth sufficient evidence to allow the jury to weigh the competing testimony, make credibility determinations, and decide whether the claim limitation was met (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 96:20–97:12–15 (mentioning the single-ended interface in Defendants’ accused products transmit control signals); Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 62:22–63:7 (disputing whether image data includes control signals)).

Accordingly, the Court denies Defendants' motion for judgment as a matter of law for non-infringement of the '290 Patent.

2. Infringement of the '029 Patent

Defendants make three arguments for why they should be entitled to a judgment of non-infringement for the '029 Patent. First, Defendants argue that Dr. Wright and Plaintiff failed to prove that Defendants infringed Claims 1, 6, and 7. Second, Defendants argue that Plaintiff has not shown that the element of "generating a look-up table" was satisfied and performed in the United States. Third, Defendants argue that Plaintiff has not presented evidence to prove the accused products "generat[e] a preparatory light for a predetermined duration." '029 Patent at 11:42–43.

First, substantial evidence supports the jury's verdict that the accused products infringe Claims 1, 6, and 7 of the '029 Patent. Dr. Wright testified that Defendants infringed with fifteen models of phones and fifty-two models of cameras, but he did not examine every model of phone and camera (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 102:10–11, 21–23). Instead, he stated, "What tells you things is the documentation by the person that designed and manufactured that device. And so I turned to the documentation that describes how [Defendants] designed it, how [the devices] work, what the functionality is. Just staring at the inside of a device wouldn't help me at all." (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 103:6–10). In this review of documentation, Dr. Wright discovered that Defendants use three different algorithms—the Strobo algorithm, the Flash aE algorithm, and the Flash algorithm—to infringe (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 103:13–104:1). Dr. Wright associated each algorithm with a representative product and explained how each product satisfies every limitation of Claims 1, 6, and 7. For the Strobo algorithm, Dr. Wright selected a WB2100 digital camera (Dkt. #263, Feb.

2, 2016 A.M. Trial Tr. at 104:16–111:14 (indicating infringement of Claim 1); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 13:8–18 (indicating infringement of Claim 6); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 15:5–19 (indicating infringement of Claim 7)). For the Flash aE algorithm, Dr. Wright selected a Galaxy Note 2 mobile phone (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 4:1–8:25 (indicating infringement for Claim 1); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 13:22–14:10 (indicating infringement for Claim 6); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 15:5–19 (indicating infringement for Claim 7)). For the Flash algorithm, Dr. Wright selected a NX-10 digital camera (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 9:15–12:22 (indicating infringement for Claim 1); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 14:13–22 (indicating infringement for Claim 6); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 15:5–19 (indicating infringement for Claim 7)). Based on Dr. Wright’s testimony and his examination of the representative products, the Court determines a reasonable jury could conclude that the accused products infringe the ’029 Patent.

Defendants argue that Dr. Wright and Plaintiff did not identify the products accused of infringing the ’029 Patent or establish the use of representative products for the remaining accused products. Defendants further argue that Dr. Wright did not identify the evidence he used to support his infringement opinion. Federal Circuit precedent allows presentation of expert testimony that analyzes infringement of a representative product on an element-by-element basis, followed by a summary opinion that all the other accused products infringe based on the same analysis. *TiVo*, 516 F.3d at 1308. Here, the use of representative products was proper. Dr. Wright testified that the remaining accused products infringe in the same manner as the representative products (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 16:13–14, 20–22). He explained that he reached this conclusion by consulting Defendants’ interrogatory responses, user guides and manuals, source code, deposition testimony, and exposure guide libraries (Dkt.

#264, Feb. 2, 2016 P.M. Trial Tr. at 16:5–12, 16–19). Defendants were free to cross-examine Dr. Wright on this testimony. However, the record does not indicate that Defendants challenged Dr. Wright’s use of representative products for the remaining accused products. As explained previously, Federal Rule of Evidence 705 allows an expert to state an opinion without testifying to the underlying facts or data. Fed. R. Evid. 705. This rule puts the responsibility on Defendants to contest Dr. Wright’s opinion and the factual bases supporting that opinion. Again, the record does not indicate that Defendants cross-examined Dr. Wright on this matter. Thus, the Court disagrees with each of these arguments.

Second, substantial evidence supports the jury’s finding that the accused products “generat[e] a look-up table storing associated image strobe durations and power values” and do such in the United States. ’029 Patent at 11:54–57. Dr. Wright testified that the look-up table is necessary for the camera to understand how the flash works (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 109:19–21). Particularly, the table determines the appropriate length of the flash and the appropriate brightness (Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 109:22–24). Additionally, Dr. Wright testified that each algorithm generates a look-up table when the camera or phone is turned on. *See* Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 110:25–111:6 (“And these [values for appropriate durations and brightness] will then get loaded into the camera so the camera knows something about its own flash unit. Otherwise, it wouldn’t know enough about its own flash unit. And this . . . gets figured out ahead of time and is loaded into the camera, and when you turn the camera on, that information then gets loaded into memory, and it generates that table.”); *see also* Dkt. #263, Feb. 2, 2016 A.M. Trial Tr. at 110:9–18 (describing the look-up table for the Strobe algorithm); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 7:18–8:18 (describing the look-up table for the Flash aE algorithm); Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 12:7–20 (describing

the look-up table for the Flash algorithm). Defendants argue that their mobile phones use LEDs as flashes (instead of flash lamps or strobe lamps filled with Xenon gas) and therefore do not use look-up tables (Dkt. #337 at p. 10). Defendants offered testimony from their non-infringement and invalidity expert, Kenneth Parulski (“Parulski”), to rebut Plaintiff’s testimony. Parulski stated, “[T]he emission of light from a mobile phone from an LED is constant as a function of time. So there’s no need to have a look-up table that characterizes the emission.” (Dkt. #319, Feb. 4, 2016 A.M. Trial Tr. at 66:18–21). Instead, he explained, “You can use multiplication in order to multiply the intensity by the amount of time it’s on, if you wanted to determine the amount of light that’s being emitted.” (Dkt. #319, Feb. 4, 2016 A.M. Trial Tr. at 66:21–24). When there is conflicting testimony, the jury, rather than the Court, makes credibility determinations and decides which testimony to believe. *MobileMedia Ideas LLC, v. Apple, Inc.*, 780 F.3d 1159, 1168 (Fed. Cir. 2015). Thus, a reasonable jury could conclude that Defendants’ accused products “generate a look-up table.”

Plaintiff also presented substantial evidence that the accused products generate look-up tables in the United States. Dr. Wright testified that a phone or camera generates a look-up table when it is turned on. Plaintiff then offered evidence of the number of accused products sold in the United States, where pictures and videos are taken (Dkt. #266, Feb. 3, 2016 A.M. Trial Tr. at 122:13–14 (indicating Defendants sold 106,480,425 accused products that infringe the ’029 Patent)). Dr. Wright testified:

[W]e have heard testimony in the last few days that over a hundred million units have been sold in the United States. So these . . . operations that are part of the anti-flicker algorithm that Samsung uses, these are automatic. They’re part of the automatic-exposure mode. You turn . . . the camera on, you turn the phone on, these modes are . . . operating in the background. The flicker algorithm is running in the background. . . . [T]he statement that this is not performed in the United States is wrong.

(Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 129:19–130:4). To rebut these contentions, Parulski testified that Defendants’ cameras generate a look-up table during the manufacturing process, which does not take place in the United States (Dkt. #319, Feb. 4, 2016 A.M. Trial Tr. at 70:3–73:25). After considering the proffered testimonies and evidence, a reasonable jury could conclude that Defendants’ accused products satisfy this claim limitation in the United States.

Third, substantial evidence supports the jury’s finding that the accused products “generat[e] a preparatory light for a predetermined duration.” ’029 Patent at 11:42–43. The Court construed this limitation to mean “preparatory light emitted for an amount of time that is determined before emitting the light” (Dkt. #105 at p. 21). Defendants argue that none of the evidence produced at trial shows that their mobile phones meet this limitation. Defendants do not dispute that the accused digital cameras meet this limitation. At trial, Dr. Wright examined the Flash aE algorithm for the Galaxy Note 2 and testified that the accused mobile phones emit a preflash for predefined duration (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 4:23–25). He stated that without a preflash for a predefined duration, the mobile phone camera would not operate properly (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 5:1–6). Parulski responded that Defendants’ mobile phones do not infringe because the length of the preflash is not known before the camera emits a preflash light (Dkt. #270, Feb. 4, 2016 A.M. Trial Tr. at 57:9–12). He stated that the length of the preflash changes to set the focus and exposure (Dkt. #270, Feb. 4, 2016 A.M. Trial Tr. at 57:16–58:4). Defendants also point to Dr. Wright’s admission on cross-examination that the length of the preflash is not known before the camera emits a preflash light (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 48:23–49:2). Plaintiff argues that this alleged admission misinterprets Dr. Wright’s testimony. Despite this disputed admission and contrary testimony from Parulski, the Court will not make credibility determinations or weigh the evidence and testimony

presented to the jury. The Court finds that Plaintiff presented substantial evidence for a reasonable jury to conclude that the accused products satisfy this claim limitation.

Accordingly, the Court denies Defendants' motion for judgment as a matter of law for non-infringement of the '029 Patent.

3. Infringement of the '884 Patent

Defendants assert that their products do not, as a matter of law, infringe Claims 1, 5, 14, and 17 of the '884 Patent.

Defendants first argue Plaintiff neither identified the products accused of infringement nor established the use of the Galaxy S2 as a representative for the other accused products. As already explained, use of a representative product to prove infringement for other accused products is proper under Federal Circuit law. *TiVo*, 516 F.3d at 1308. Plaintiff presented substantial evidence that the Galaxy S2 is a representative product. At trial, Dr. Wright explained that the '884 Patent solves the problem of flicker effect when a video is taken under fluorescent lights. Dr. Wright testified that Defendants infringe the '884 Patent with twenty-one phones, three computers, and five tablets (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 18:19–19:7). He further testified that he chose the Galaxy S2 as a representative product because it infringes the asserted claims in the same way as the other accused products (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 19:16–18). Dr. Wright then described how the Galaxy S2 infringes each of the asserted claims (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 19:19–32:7). To support his infringement opinion for the remaining phones, tablets, and computers, Dr. Wright stated he considered each accused product, Defendants' interrogatory responses, Defendants' documentation about flicker, and deposition testimony (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 32:19–34:2). Defendants were free to rebut Dr. Wright's testimony and his use of the Galaxy S2

as a representative product. However, the record does not indicate that Defendants' cross-examined Dr. Wright about his use of a representative product.

Defendants also argue that Dr. Wright did not identify the documents used to support his infringement opinion. Dr. Wright was not required to testify about the facts and data underlying his expert opinion unless Defendants cross-examined him regarding such facts and data. Fed R. Evid. 705. Again, the record does not indicate that Defendants challenged Dr. Wright's testimony in such a manner.

Next, Defendants contend that Plaintiff has not established the accused products satisfy the "adjusting while maintaining" limitation of the asserted claims. Defendants also contend that they do not perform this limitation in the United States. The record does not support either of these arguments. The asserted claims require "adjusting the integration time while maintaining the integration time at an integral multiple of the period of periodic intensity" to vary the gain or brightness. '884 Patent at 7:3–6. Dr. Wright testified that Defendants' technical documents show the accused products fulfill this claim limitation. Dr. Wright then referenced a document titled "Flicker Description" and explained that Defendants control the overall gain by adjusting the integration time and constraining it to integer multiples of the lighting (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 24:6–11 (referring to Pl.'s Exhibit #22)). Defendants offered Dr. Dean Neikirk to rebut Dr. Wright's testimony. Dr. Neikirk testified that graphs in Defendants' technical documentation support a finding of non-infringement. Particularly, he pointed to an exposure graph that depicted the integration time was not maintained at any integer multiple of lighting (Dkt. #271, Feb. 4, 2016 P.M. Trial Tr. at 110:2–112:23 (describing Pl.'s Exhibit #523 at p. 23)). Dr. Wright disagreed with Dr. Neikirk and offered another interpretation of the same exposure graph (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 130:6–131:22 (stating the only two

exposures labeled on the graph, Exposure 1 and Exposure 2, indicate the use of integration times at integer multiples)). Since there was conflicting testimony regarding this claim limitation, “the jury [was] permitted to make credibility determinations and believe the witness it consider[ed] more trustworthy.” *MobileMedia Ideas LLC*, 780 F.3d at 1168. The Court determines that Plaintiff presented the substantial evidence with substantial evidence such that a reasonable jury could conclude that Defendants’ accused products satisfy this claim limitation.¹ The Court also determines that Plaintiff presented substantial evidence that Defendants’ accused products infringe the asserted claims in the United States. *See* Dkt. #266, Feb. 3, 2016 A.M. Trial Tr. at 122:15–16 (indicating Defendants sold 121,019,298 accused products that infringe the ’884 Patent); Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 129:16–130:4 (stating the anti-flicker algorithm is part of the automatic-exposure mode, which operates in the background of accused products sold in the United States).

Finally, Defendants argue Plaintiff has not shown the “integration time adjustment block” limitation exists in any of the accused products. Defendants contest Dr. Wright’s testimony because he attempted to show the accused devices satisfy the “coupled” limitation by satisfying other limitations in the claim (Dkt. #337 at p. 14). The Court finds that Plaintiff submitted substantial evidence to show infringement of this limitation. Asserted Claim 14 and dependent Claim 17 require “an integration time adjustment block coupled to the programmable integration time circuitry.” ’884 Patent at 7:52–53. Dr. Wright testified the accused products meet this

¹ With respect to Defendants’ products that include third-party image processors, Defendants state that Plaintiff did not present any evidence of how these devices operate. Defendants argue that Plaintiff must show how those third-party image processors are configured and function. The Court disagrees. After describing infringement for the Galaxy S2 as a representative product, Dr. Wright testified that the remaining accused phones, which include third-party image processors, infringe the asserted claims. He reached this conclusion by examining each accused product and documentation from Defendants and from Qualcomm, a vendor that makes image processors for the accused products (Feb. 2, 2016 P.M. Trial Tr., Dkt. #264 at 32:21–33:7). Defendants were free to cross-examine Dr. Wright on this testimony and the underlying facts and data making up his opinion. Therefore, a reasonable juror could have concluded that the accused products and any third-party processors therein meet the limitations recited in the asserted claims.

claim element (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 22:16–20). Dr. Wright explained that Defendants’ technical data sheet and application note refer to an auto flicker algorithm that prevents flicker by using an integration time limited to integer multiples (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 21:5–22:14 (examining Pl.’s Exhibit #482 at p. 34 and Pl.’s Exhibit #582 at p. 84)). He further explained that the auto flicker algorithm is the integration time adjustment block and the integration time control circuitry is the programmable integration time circuitry (Dkt. #264, Feb. 2, 2016 P.M. Trial Tr. at 20:16–21:3, 21:5–22:20 (identifying the integration time adjustment block and programmable integration circuitry as recited in the asserted claims)). Dr. Wright acknowledged that if the adjustment block was not coupled to the adjustment circuitry, then the product would not function (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 133:6–13). Thus, a reasonable jury could conclude that Defendants’ accused products meet this claim limitation.

Accordingly, the Court denies Defendants’ motion for judgment as a matter of law for non-infringement of the ’884 Patent.

B. Induced Infringement

Section 271(b) provides that “[w]hoever actively induces infringement of a patent shall be liable as an infringer.” 35 U.S.C. § 271(b). “In order to prevail on an inducement claim, the patentee must establish first that there has been direct infringement, and second that the alleged infringer knowingly induced infringement and possessed specific intent to encourage another’s infringement.” *ACCO Brands, Inc.*, 501 F.3d at 1312. In other words, “inducement requires evidence of culpable conduct, directed to encouraging another’s infringement, not merely that the inducer had knowledge of the direct infringer’s activities.” *DSU Med. Corp. v. JMS Co.*, 471 F.3d 1293, 1306 (Fed. Cir. 2006) (en banc). “[S]pecific intent may be inferred from circumstantial evidence where a defendant has both knowledge of the patent and specific intent

to cause the acts constituting infringement.” *Ricoh Co. v. Quanta Comput. Inc.*, 550 F.3d 1325, 1342 (Fed. Cir. 2008). “[L]iability for induced infringement can only attach if the defendant knew of the patent and knew as well that ‘the induced acts constitute patent infringement.’” *Commil USA, LLC v. Cisco Sys., Inc.*, 135 S. Ct. 1920, 1926 (2015) (quoting *Global-Tech Appliances, Inc. v. SEB S.A.*, 131 S. Ct. 2060, 2068 (2011)). A patentee can satisfy the knowledge requirement by showing actual knowledge or willful blindness. *Global-Tech*, 131 S. Ct. at 2068. Under the doctrine of willful blindness, the defendant must (1) believe subjectively that there is a high probability that a fact exists; and (2) take deliberate actions to avoid learning of that fact. *Id.* at 2070–71. A plaintiff may prove the intent element of inducement through circumstantial evidence. *Lucent Techs., Inc. v. Gateway, Inc.*, 580 F.3d 1301, 1322 (Fed. Cir. 2009). “Evidence of active steps taken to induce infringement, such as advertising an infringing use, can support a finding of an intention for the product to be used in an infringing manner.” *Id.* (citing *DSU Med. Corp.*, 471 F.3d at 1305).

The jury found that Defendants induced infringement of asserted claims for the ’029 and ’884 Patents. Defendants argue that no reasonable jury could have found that they had actual knowledge or committed willful blindness to constitute induced infringement.

There is substantial evidence to support a verdict of induced infringement. First, as already explained, the Court finds that Plaintiff presented substantial evidence of direct infringement of the patents-in-suit. Second, Plaintiff presented substantial evidence Defendants “knowingly induced infringement and possessed the specific intent to encourage another’s infringement.” *ACCO Brands, Inc.*, 501 F.3d at 1312. It is undisputed that Defendants knew of the asserted patents. At trial, Defendants offered two witnesses, Mr. Bang and Mr. Lee, who testified about Defendants’ knowledge of Plaintiff’s patents. Mr. Bang testified that Defendants

discontinued discussions with Plaintiff regarding its patent portfolio and did not perform an analysis of Plaintiff's patents after 2011. Mr. Bang further testified that he did not review any pleadings related to Plaintiff's earlier lawsuit against other smartphone Defendants or monitor the progress of that litigation. Mr. Lee testified that Defendants determined that Plaintiff's patents were not worth acquiring. In the middle of trial, Defendants produced previously undisclosed documents regarding facts within the personal knowledge of Mr. Bang and Mr. Lee. The Court stated, "This evidence contradicts the sworn testimony of Mr. Bang and Mr. Lee and indicates that the testimony that Mr. Bang and Mr. Lee gave about [Defendants'] discussion with [Plaintiff] and its analysis of [Plaintiff's] patents was false and therefore not worthy of belief." (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 112:9–13). The Court then struck these portions of Mr. Bang and Mr. Lee's testimony from the record and instructed the jury to disregard the testimonies on this issue (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 112:14–17).

Plaintiff also presented evidence that Defendants took active steps to encourage or intend their customers to infringe the asserted patents. *See* Pl. Exhibit #276 (describing the desirable features of an infringing camera in a product-offering guide); Pl. Exhibit #397 at 40, 59–61 (instructing how to use infringing features of the WB21000); Pl. Exhibit #334 at 79–81 (instructing how to take photos); Pl. Exhibit #166 (advertising the camera as a key feature of an infringing product); Defs' Exhibit #681 (advertising the camera in an infringing product)). A jury could infer the specific intent to induce infringement from the offered circumstantial evidence. *Lucent Techs.*, 580 F.3d at 1322. As such, a reasonable jury could find that Defendants were liable for induced infringement.

Further, Defendants argue that they held a good-faith belief in their non-infringement defenses, which shows a lack of intent for active inducement. "[T]he proper focus of indirect

infringement analysis is on the subject knowledge of the accused infringer” rather than the objective reasonableness of non-infringement positions. *Unwired Planet, LLC v. Apple Inc.*, 829 F.3d 1353, 1364 (Fed. Cir. 2016). Whether Defendants had a good-faith belief in their non-infringement defenses was not an issue tried before the jury. Because Defendants never asserted this defense for induced infringement during trial, a reasonable jury could have concluded that Defendants induced infringement of the asserted patents.

Accordingly, the Court denies Defendants’ motion for judgment as a matter of law for non-induced infringement.

C. Invalidity

Defendants assert that their experts, Parulski and Dr. Neikirk, provided clear, convincing, and specific evidence that the ’029 and the ’884 Patents are invalid on the grounds of anticipation and obviousness.

1. Obviousness of ’029 Patent

A patent is invalid for obviousness “if the differences between the claimed invention and the prior art are such that the claimed invention as a whole would have been obvious before the effective filing date of the claimed invention to a person having ordinary skill in the art to which the claimed invention pertains.” 35 U.S.C. § 103. Obviousness is a legal determination based upon underlying factual findings. *Soverain Software LLC v. Newegg Inc.*, 705 F.3d 1333, 1336 (Fed. Cir. 2013). The factual findings are based upon several factors, including “(1) the scope and content of the prior art, (2) the difference between the prior art and the claimed invention, (3) the level of ordinary skill in the field of the invention, and (4) any relevant objective considerations.” *Id.* (citing *Graham v. John Deere Co.*, 383 U.S. 1, 17–18 (1966)). Although the Court must determine the ultimate legal question of obviousness, the Court must presume the

jury resolved all underlying factual findings in favor of the verdict and accept the jury's findings if supported by substantial evidence. *Kinetic Concepts, Inc. v. Smith & Nephew, Inc.*, 688 F.3d 1342, 1356–57 (Fed. Cir. 2012).

Defendants argue that they demonstrated by clear and convincing evidence the invalidity of the '029 Patent. Specifically, Defendants state Claims 1, 6, and 7 are obvious in view of the combination of U.S. Patent No. 6,195,127 ("Sugimoto") and published Japanese Patent Application No. 1999-119288 ("Shimada").

For the first time, Defendants argue that the asserted claims are obvious in view of the Nikon D1 camera used together with the SB-28 or SB028DX flash units. During trial, Defendants did not present any evidence of how the Nikon system discloses these claim limitations. The Court will not consider this argument in determining whether a reasonable jury could have found the '029 Patent invalid for obviousness.

Claim 1 recites:

A method of adjusting image lighting, the method comprising:

generating a preparatory light for a predetermined preparatory duration;

capturing a preparatory image while generating the preparatory light, wherein the preparatory image is represented by preparatory image data;

determining an average preparatory image luminance of the preparatory image based on the preparatory image data and weighing at least a subset of the preparatory image data;

generating a supplemental strobe duration based on the average preparatory image luminance and luminance weightings; and

generating a look-up table storing associated image strobe durations and power values including a preparatory image strobe duration and associated preparatory power value.

'029 Patent at 11:40–58. Claim 6 is a dependent claim that includes all of the limitations of Claim 1. While Claim 7 includes all of the limitations of Claim 1 and adds the requirement of “a memory having machine readable instructions” or sets of “machine readable instructions” relating to each limitation.

At trial, Parulski testified that Sugimoto discloses each limitation of the asserted claims, except for a look-up table that stores image strobe duration and power values. The remaining limitation, Parulski noted, was disclosed in the Shimada reference. Parulski walked through the Sugimoto and Shimada references and explained how the asserted claims were obvious in view of the references (Dkt. #270, Feb. 4, 2016 A.M. Trial Tr. at 29:16–46:13). Parulski mentioned that a person of ordinary skill in the art at the time of the '029 Patent would combine the teachings of Sugimoto with Shimada (Dkt. #270, Feb. 4, 2016 A.M. Trial Tr. at 48:9–49:11 (asserting a person of ordinary skill would combine the Sugimoto with Shimada because the references are related to the same field, discuss flash photography, and have overlapping disclosures)).

Dr. Wright disagreed with Parulski's testimony. He indicated the look-up table in Shimada encompasses only main flash and does not include flash duration as required by Claim 1 (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 155:19–20). Dr. Wright also testified that during the prosecution of the '029 Patent, the Patent Office considered the combination of Sugimoto and Sugahara, a reference Dr. Wright testified as an invention similar to Shimada (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 155:7–10, 156:6–12).

In light of conflicting testimony from Parulski and Dr. Wright, a reasonable jury could conclude the combination of Sugimoto and Shimada does not disclose the look-up table mentioned in the asserted claims. Thus, the Court is not convinced that Defendants met their

burden of proving by clear and convincing evidence that Claims 1, 6, and 7 are invalid for obviousness.

Accordingly, the Court denies Defendants' motion for judgment as a matter of law for invalidity of the '029 Patent.

2. Anticipation of '884 Patent

A patent is invalidated as anticipated if “the invention was patented or described in a printed publication” more than one year before the patent application was filed. 35 U.S.C. § 102(b). To be anticipatory, the prior art reference must “explicitly or inherently” disclose each and every element of the claimed invention. *In re Gleave*, 560 F.3d 1331, 1334 (Fed. Cir. 2009). An anticipatory prior art reference must also enable “one of skill in the art to practice an embodiment of the claimed invention without undue experimentation.” *Am. Calcar, Inc. v. Am. Honda Motor Co.*, 651 F.3d 1318, 1341 (Fed. Cir. 2011); *see also In re Donohue*, 766 F.2d 531, 533 (Fed. Cir. 1985) (“Such possession is effected if one of ordinary skill in the art could have combined the publication’s description of the invention with his own knowledge to make the claimed invention.”). Finally, the party asserting invalidity must prove anticipation by clear and convincing evidence. *Orion IP, LLC v. Hyundai Motor Am.*, 605 F.3d 967, 975 (Fed. Cir. 2010).

Defendants contend that they demonstrated by clear and convincing evidence that the '884 Patent is anticipated by different prior art references. In particular, Defendants argue U.S. Patent No. 6,567,123 (“Hashimoto”) anticipates Claims 1, 5, and 14, and U.S. Patent No. 7,289,145 (“Johnson”) anticipates Claims 1, 5, 14, and 17. Claims 1 and 14 are independent claims. Claim 5 depends on Claim 1, while Claim 17 depends on Claim 14.

At trial, Dr. Neikirk testified that Hashimoto and Johnson disclosed each and every limitation of the asserted claims. First, he explained to the jury that Hashimoto discloses an

electronic camera used for making videos, taking pictures, and adjusting the integration time or shutter speed to integral multiples of the flicker period (Dkt. #271, Feb. 4, 2016 P.M. Trial Tr. at 126:22–127:1). Next, Dr. Neikirk walked through the Johnson patent. He stated Johnson discloses a camera that uses either a charged coupled device or a CMOS image system. He further stated Johnson discusses using shutter speed to suppress flicker and setting that shutter speed to integer multiples of a flicker period (Dkt. #271, Feb. 4, 2016 P.M. Trial Tr. at 147:9–16). Dr. Neikirk pointed to various figures and line references in Hashimoto and Johnson to show how the patents anticipate the asserted claims.

In rebuttal, Dr. Wright stated that Hashimoto fails to disclose the elements of “setting the integration time to an integral multiple of the period of the periodic intensity” or “adjusting while maintaining” (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 123:7–124:1) (referring limitations mentioned in the asserted claims)). He testified that the Hashimoto patent discusses two specific shutter speeds, neither of which would reduce flicker in the United States. Likewise, for the Johnson patent, Dr. Wright testified that Johnson has very little to do with the ’884 Patent. In fact, he asserted the Johnson patent is a reformatter that converts signals from an atypical CCD sensor with four colors and reformats that information into a standard video signal with three colors. Dr. Wright also testified that although Johnson mentions the concept of a “flickerless mode,” Johnson does not explain how to achieve this mode (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr. at 124:2–22).

The Court concludes that substantial evidence supports the jury’s findings regarding Hashimoto and Johnson. It was reasonable for the jury to find that Defendants did not present clear and convincing evidence of anticipation. A reasonable jury was free to credit Dr. Wright’s testimony over Dr. Neikirk’s, and it is not the Court’s role to second guess the credibility

determinations of the jury. *SIBIA Neurosciences, Inc. v. Cadus Pharm. Corp.*, 225 F.3d 1349, 1355 (Fed. Cir. 2000).

Accordingly, the Court denies Defendants' motion for judgment as a matter of law for invalidity of the '884 Patent.

3. Obviousness of '884 Patent

Defendants argue that they demonstrated by clear and convincing evidence that a combination of prior art references make Claims 6 and 17 of the '884 obvious. Claim 6 depends on Claim 1 and adds the step of "detecting the period of the periodic intensity." Claim 17 depends on Claim 14 and adds three additional limitations: an analog, variable gain stage; an analog to digital converter; and a gamma correction stage receiving and providing digitized pixel data. Specifically, Defendants point to the following obviousness combinations presented during trial: (1) the combination of Johnson and U.S. Patent No. 5,960,153 ("Oster") renders Claim 6 obvious; (2) the combination of Hashimoto and published Japanese Patent Application H1-204578 ("Kinugawa") renders Claim 6 obvious; and (3) the combination of Hashimoto and published Japanese Patent Application No. H9-318804 ("Hata") renders Claim 17 obvious.

After reviewing the record, the Court determines that substantial evidence supports the jury's finding of non-obviousness. Defendants offered three obviousness combinations: Johnson with Oster, Hashimoto with Kinugawa, and Hashimoto with Hata. During trial, there was conflicting expert testimony on the question of whether a person of ordinary skill in the art would have been motivated to combine the references to reach the embodiments in Claims 6 and 17. Additionally, Plaintiff offered evidence supporting the commercial success of the '884 Patent, a secondary consideration of non-obviousness (Dkt. #265, Feb. 3, 2016 A.M. Trial Tr. at 17:2–19). The jury weighed the testimony and concluded that Defendants failed to show

obviousness by clear and convincing evidence. Thus, a reasonable jury could conclude that Defendants did not establish by clear and convincing evidence that the '884 Patent would have been obvious to one of ordinary skill in the art at the time of the invention.

Accordingly, the Court denies Defendants' motion for judgment as a matter of law on invalidity of the '884 Patent.

D. Damages

Defendants assert the evidence presented at trial does not support the jury's award of \$6,970,380.50 in favor of Plaintiff. In view of the alleged deficiencies in Plaintiff's proof and the methodology used by its expert, Defendants contend the Court should have granted their *Daubert* motion and excluded the testimony. As such, Defendants present different options for the Court: grant a new trial, enter a judgment of zero damages, or use the alternative damages estimate of \$2,059,202, supported by Defendants' expert, Dr. M. Ray Perryman.

Defendants largely recycle arguments made in their *Daubert* motion challenging Plaintiff's damages expert, Michele M. Riley ("Riley").² For example, Defendants attack the evidence on which Riley relied and the methodologies she used to develop her opinion (Dkt. #337 at pp. 42–46; Dkt. #337 at pp. 46–47). The Court will not reiterate its analysis regarding the reliability of Riley's opinion under *Daubert*. Instead, the Court adopts and incorporates its prior decision addressing this issue (Dkt. #225 at p. 3). *See Versata Software*, 717 F.3d at 1264 ("Under the guise of the sufficiency of the evidence, SAP questions the admissibility of Versata's expert testimony and whether his damages model is properly tied to the facts of the

² Specifically, Defendants' present motion reasserts the following: (1) whether Defendants' worldwide profits on all products are a proper basis for the calculation of damages; (2) whether there was a basis for Riley's calculation for royalty rates; (3) whether Plaintiff's non-arm's length profit-sharing arrangement with ESS was sufficient to set any lower bound on damages; (4) whether the survey information about camera resolution was factually tethered to the patented benefits and isolated their value; (5) whether Riley's reasonableness checks on her calculations of damages were legally and factually proper (Dkt. #341 at pp. 40–50).

case. Such questions should be resolved under the framework of the Federal Rules of Evidence and through a challenge under *Daubert v. Merrell Dow Pharm., Inc.*, 509 U.S. 579 (1993).”). The issue before the Court is whether substantial evidence supports the jury’s damages award. Plaintiff bears the burden of proving its damages. *Lucent Techs.*, 580 F.3d at 1324. “A jury’s decision with respect to an award of damages ‘must be upheld unless the amount is grossly excessive or monstrous, clearly not supported by the evidence, or based only on speculation or guesswork.’” *Id.* at 1310 (quoting *State Contracting & Eng’g Corp. v. Condotte Am., Inc.*, 346 F.3d 1057, 1072 (Fed. Cir. 2003)).

The jury heard arguments and evidence from both sides regarding damages. The jury was tasked with weighing the credibility and degree to which it could rely on the damages figures presented by both parties’ experts. The Court will grant a judgment as a matter of law on damages or a new trial only if there was insufficient evidence presented to support the jury’s damages award. In light of the testimony that was provided at trial, the Court finds that substantial evidence supported the jury’s damages determination. To the extent Defendants raise grounds other than their Rule 702 objections, Defendants’ challenges to Riley’s damages opinion go to the weight of her testimony. Defendants had ample opportunity to cross-examine Riley, who evidently the jury deemed credible. Defendants further challenge the jury’s determination of an intermediate royalty rate that divided Plaintiff’s calculation of damages in half. Defendants contend there is no evidentiary basis in the record for this royalty rate because Riley did not provide any evidence or guidance for selecting an amount different from the damages she calculated. The Court disagrees. In *Fuji Photo Film Co., v. Jazz Photo Corp.*, the Federal Circuit stated, “[T]he jury is not bound to accept a rate proffered by one party’s expert but rather may choose an intermediate royalty rate.” 394 F.3d 1368, 1378 (Fed. Cir. 2005) (citing

Unisplay, S.A. v. Am. Elec. Sign Co., 69 F.3d 512, 519 (Fed. Cir. 1995)). However, the jury’s royalty amount “must be within the range encompassed by the whole.” *Unisplay, S.A.*, 69 F.3d at 519. Riley testified that the range of royalty for any accused product fell between 2.7 cents and 13.5 cents (Dkt. #267, Feb. 3, 2016 P.M. Trial Tr. at 10:9–16). The jury’s award of two cents per unit for the ’029 Patent and four cents per unit for the ’884 Patent. The highest royalty for any accused product—six cents—falls within the range encompassed by Riley’s testimony. Thus, the jury’s award was proper.

Accordingly, the Court denies Defendants’ judgment as a matter of law and request for a new trial on damages.

II. New Trial

Defendants provide four reasons why they are entitled to a new trial. The Court will address each reason separately.

1. Exclusion of Defendants’ Defense Based on the Sony License

The Court prevented Defendants from “relying on Sony image sensors as non-infringing alternatives” and from presenting “the Sony License defense at trial” (Dkt. #231 at p. 2).

Defendants assert the Court’s exclusions were an abuse of discretion and require a new trial on liability and damages. Defendants argue the Court was erroneous because (1) Plaintiff concealed its reliance on Sony sensors throughout this case; and (2) the Court prevented Defendants from adequately defending the liability and damages portions of the case.

The Court has already considered and rejected Defendants’ arguments regarding the Sony license defense. On January 21, 2016, the Court denied Defendants’ motion for leave to file summary judgment out-of-time (Dkt. #219). The Court was unconvinced that Plaintiff concealed its reliance on Sony image sensors. The Court stated in its Memorandum Opinion and Order:

[M]uch of the information relied upon by Defendants to support [their] motion for summary judgment was known, or should have been known, by Defendants before September 9. First, as Defendants explain, the accused Samsung-Sony products compromise almost half of the accused products in this lawsuit (Dkt. #155 at p. 3). Second, Defendants were aware that the patents-in-suit include, at least as one limitation, “an image sensor coupled to a memory” (Dkt. #1, Ex. C at col. 14, ln. 3). Third, Defendants had identified accused products that contain, as the only image sensor, a Sony image sensor (Dkt. #155 at p. 8). Fourth, Defendants had access to the Sony License Agreement as of April 2, 2015 (Dkt. #169, Ex. 3). Considering these factors, the Court finds that even if Plaintiff “obscured” the fact that it is relying upon Sony image sensors, Defendants could have been aware of the potential relevance of the Sony License regarding what it describes as almost half of the accused products long before September 9, 2015, such that the timing of the filing was in the reasonable control of Defendant. This tends to suggest that the current filing is not untimely due to “excusable neglect.”

(Dkt. #219 at p. 4). Similarly, in another opinion, the Court determined that Defendants waived the Sony license defense by not raising the defense until well beyond the deadline for summary judgment:

Defendants may have given a boilerplate, general license defense in [their] answer, but even in supplementing [their] responses to interrogatories[,] Defendants only gave an indication of asserting a license to one or more asserted claims of the patents-in-suit per the terms of [their] membership in the MIPI Alliance (Dkt. #277, Ex. I at pp. 38–42). If anything, Defendants’ decision to supplement their answer to interrogatory regarding license defenses on July 13, 2015, and September 7, 2015, after receiving the Sony License Agreement on April 2, 2015, indicated an active intention *not* to assert the Sony License.

(Dkt. #329 at p. 6). The Court continued:

According to Defendants’ interpretation of the ’029 Patent, not reliant on any of Plaintiff’s views, the ’029 Patent “teaches that an image sensor is the specific component that captures this preparatory image” (Dkt. #277 at p. 2). Defendants have never presented evidence as to why, given this understanding of the patent and knowledge of their own products’ usage of Sony image sensors, Defendants did not assert that they may be entitled to assert the Sony License, particularly if Plaintiff agreed to Defendants’ understanding of the patents-in-suit. After all, Defendants generally pleaded a boilerplate license defense and presumptively stated that “Samsung may be entitled to a license” with respect to [their] membership in the MIPI Alliance.

(Dkt. #329 at p. 6). Because Defendants almost exclusively reargue and expound on arguments previously made, the Court will not analyze them again. The Court instead adopts and incorporates its prior decisions on the issue (Dkt. #219; Dkt. #329).

Accordingly, the Court denies Defendants' motion for a new trial on liability and damages based on the Court's exclusion of the Sony license defense.

2. Mid-Trial Discovery Sanction

During trial, Defendants produced for the first time six emails concerning Defendants' attempts to acquire image sensor patents. Particularly, Defendants produced communications between Mr. Bang and Stuart Kaler, a third-party broker retained by Defendants to explore whether Plaintiff was interested in selling its patents. Due to the late production of documents, Plaintiff requested that the Court impose sanctions to strike Defendants' laches defense and prevent Defendants from contesting willfulness. Defendants submitted a brief and a declaration from Mr. Bang who explained why Defendants did not identify or produce the emails earlier (Dkt. #238; Dkt. #238 at Exhibit 1). Mr. Bang indicated that he believed the communications about Plaintiff with Mr. Kaler ended in 2011, and he had no recollection of any events happening on or after mid-2012. Further, Defendants indicated that Mr. Bang and Mr. Lee testified consistently with their recollections and about the documents identified during their deposition preparations. The Court granted Plaintiff's requested relief and instructed the jury that portions of Mr. Bang and Mr. Lee's testimony were false and not worthy of belief.

Defendants state the Court's sanction was an abuse of discretion, warranting a new trial. They claim the sanction was disproportionate and extreme, especially in view of Mr. Bang's explanation and the Court's discovery order that required a specific request from Plaintiff. In addition, Defendants argue the Court's instruction regarding Mr. Bang and Mr. Lee's testimony

improperly invaded the jury's determination of a witness's credibility. These arguments are without merit.

Federal Rule of Civil Procedure 26(e) provides:

- (1) *In General.* A party who has made a disclosure under Rule 26(a)—or who has responded to an interrogatory, request for production, or request for admission—must supplement or correct its disclosure or response:
- (A) in a timely manner if the party learns that in some material respect the disclosure or response is incomplete or incorrect, and if the additional or corrective information has not otherwise been made known to the other parties during the discovery process or in writing

Fed. R. Civ. P. 26(e)(1)(A). Moreover, Federal Rule of Civil Procedure 37 provides:

- (1) If a party fails to provide information or identify a witness as required by Rule 26(a) or (e), the party is not allowed to use that information or witness to supply evidence on a motion, at a hearing, or at a trial, unless the failure was substantially justified or harmless.

Fed. R. Civ. P. 37(c)(1). Rule 37 of the Federal Rules of Civil Procedure “empowers the courts to impose sanctions for failures to obey discovery orders.” *Smith & Fuller, P.A. v. Cooper Tire & Rubber Co.*, 685 F.3d 486, 488 (5th Cir. 2012); Fed. R. Civ. P. 37(b). The sanctions available under Rule 37 are flexible, and the court has authority to apply them in many varied forms, depending on the facts of each case. “Rule 37 only requires the sanction the Court imposes hold the scales of justice even.” *Guidry v. Cont’l Oil Co.*, 640 F.2d 523, 533 (5th Cir. 1981) (internal quotation marks and citation omitted). Extreme sanctions are remedies of last resort and are appropriate only when the deterrent value of Rule 37 cannot be achieved by using less drastic measures. *Batson v. Neal Spelce Assocs., Inc.*, 765 F.2d 511, 514 (5th Cir. 1985).

The Court conducted a detailed review of the facts that warranted sanctions in its August 24, 2016 opinion. First, the Court found that Defendants did not amend their disclosures in a timely manner. Defendants indicated in a sworn response to Interrogatory No. 7 that they knew only of Plaintiff’s patents when the case started in June 2014. This response remained

unchanged until after depositions and other discovery showed this to be incorrect. Next, Defendants did not produce relevant documents during discovery, violating the Federal Rules of Civil Procedure. *See* Fed. R. Civ. P. 26(b)(1), 34(a) (requiring a party, upon request, to produce any nonprivileged matter that relates to another party's claims or defenses). On July 15, 2015, Plaintiff specifically requested Defendants to produce emails and other documents related to Mr. Kaler during the 2012 to 2014 period (Dkt. #240, Exhibit 2 at p. 1–2). Defendants did not produce such documents before the September 9, 2015 discovery deadline. *See* Dkt. #329 at p. 13 (“Defendants knew at least by July 15, 2015, about the need to produce e-mails and other documents relating to Mr. Kaler. . . . Defendants apparently never searched for nor produced any such documents until the fourth day of trial at 2:19 a.m. Defendants then only produced documents found on Mr. Kaler’s laptop during witness preparations—not any documents from Defendants’ files. Defendants searched their own files for such Kaler documents only after Plaintiff and the Court had raised the issue of sanctions.”). Finally, the Court found that Defendants offered false testimony about Defendants’ knowledge of Plaintiff’s patents. Mr. Bang and Mr. Lee testified that Defendants did not know of Plaintiff’s patents until after 2011. However, the evidence produced indicates that Defendants “did track and attempt to obtain, despite testimony otherwise, Plaintiff’s patents for years before this lawsuit” (Dkt. #329 at p. 12). The Court recognized Defendants’ conduct related to issues of infringement, willfulness, laches, and credibility. Based on the Defendants’ conduct before and during trial, the Court properly issued sanctions it considered just under the circumstances. Fed. R. Civ. P. 37 (b)(2)(A).

For a new trial, Defendants must demonstrate “the verdict [was] against the weight of the evidence, the damages award [was] excessive, the trial was unfair, or prejudicial error was

committed in its course.” *Smith*, 773 F.2d at 612–13. Defendants have not shown the Court’s imposition of sanctions meets the standard for a new trial.

Accordingly, the Court denies Defendants’ motion for a new trial based on mid-trial sanctions.

3. Willful Infringement

The Supreme Court in *Halo Electronics, Inc. v. Pulse Electronics, Inc.*, 136 S. Ct. 1923 (2016), changed the framework for awarding enhanced damages in cases of willful infringement. Before *Halo*, a patentee seeking enhanced damages first needed to show by clear and convincing evidence that the infringer acted despite an objectively high likelihood that its actions infringed a valid patent. *Id.* at 1930 (citing *In re Seagate Tech., LLC*, 497 F.3d 1360, 1371 (Fed. Cir. 2007) (en banc)). A patentee tended not to meet this objective prong where an accused infringer had a reasonable defense to infringement. *Bard Peripheral Vascular, Inc. v. W.L. Gore & Assocs.*, 682 F.3d 1003, 1005–06 (Fed. Cir. 2012). Second, the patentee had to show the risk of infringement “was either known or so obvious that it should have been known to the accused infringer.” *In re Seagate*, 497 F.3d at 1371. *Halo* criticized the objective reckless prong, reasoning it “excludes from discretionary punishment many of the most culpable offenders” and “mak[es] dispositive the ability of the infringer to muster a reasonable (even though unsuccessful) defense at the infringement trial.” 136 S. Ct. at 1932–33. The Supreme Court explained that an infringer’s subjective bad faith alone could support an enhanced damages award. *Id.* at 1932. Moreover, *Halo* made clear that it is the infringer’s state of mind at the time of the challenged conduct that matters, without regard to any later reasonable defense at trial. *Id.* at 1933. After *Halo*, the Federal Circuit reiterated that “the factual components of the

willfulness question should be resolved by jury.” *WBIP, LLC v. Kohler Co.*, 829 F.3d 1317, 1341 (Fed. Cir. 2016).

Defendants assert a judgment as a matter of law of no willfulness or a new trial are required in light of the Supreme Court’s decision in *Halo*. Defendants contend a new trial is necessary because the jury’s determination of willfulness was under the now-abrogated *Seagate* standard rather than under *Halo*. However, *Halo* called into question only the objective prong of *Seagate*, meaning a favorable jury finding under the subjective prong would suffice to establish subjectively willful conduct. *Innovation Toys, LLC v. MGA Entm’t, Inc.*, 677 F. App’x 922, 994 (Fed. Cir. 2016). Thus, under *Halo*, subjective willfulness alone, intentional or knowing, may support an award of enhanced damages. *Halo*, 136 S. Ct. at 1933. In fact, the Federal Circuit has affirmed enhanced damages based on jury findings under the subjective prong of *Seagate*. See, e.g., *WBIP*, 829 F.3d at 1341 (affirming the district court because *Halo* did not change “the established law that the factual components of the willfulness question should be resolved by the jury”).

Defendants next argue that they are entitled to judgment as a matter of law as to willfulness because there was insufficient evidence to support the jury’s finding. Defendants are incorrect. The evidence offered at trial established that Defendants had pre-suit knowledge of the patents-in-suit and took no steps to avoid infringement after becoming aware of the patents. The Court also instructed the jury that evidence produced at trial directly contradicted sworn testimony from Mr. Lee and Mr. Bang, who testified about Defendants’ pre-suit knowledge of the patents-in-suit (Dkt. #275, Feb. 5, 2016 P.M. Trial Tr., at 111:14–112:16). In addition, the jury found willful infringement by clear and convincing evidence—a higher burden of proof than required after *Halo*. 136 S. Ct. at 1934 (decreasing the standard for willfulness and enhanced

damages from clear and convincing evidence to a preponderance of the evidence). The jury had record evidence from which it could find that Defendants had knowledge of the patents-in-suit, and thus the jury's finding is supported by substantial evidence.

Finally, Defendants argue that *Halo* converted the Court's sanction into a directed verdict because Defendants could not contest subjective willfulness. The Court's instruction did not require the jury to find willfulness. Rather, the jury was free to decide whether Plaintiff met its burden on the issue. Further, the Court's sanction did not prevent Defendants from establishing non-infringement or invalidity of the patents-in-suit to avoid willfulness liability. Similarly, the Court dismisses this argument.

Defendants' arguments are insufficient to warrant the requested relief. Accordingly, the Court denies Defendants' motion for judgment as a matter of law of no willful infringement, or in the alternative, for a new trial on the issue of willful infringement.

4. Jury Instructions

Defendants request a new trial on invalidity and damages, alleging the Court committed two errors in its jury instructions. The Court declines to grant a new trial for each of these arguments.

Defendants first argue that the Court erroneously instructed the jury regarding Defendants' burden of proof with respect to anticipatory prior art. With regard to the burden of proof for anticipatory prior art, the Court instructed the jury as follows: "Samsung must prove by clear and convincing evidence that this single item of prior art must enable one of ordinary skill in the art to make the invention without undue experimentation." (Dkt. #250 at p. 18). The Federal Circuit has explained that "when an accused infringer asserts that a prior art patent anticipates specific patent claims, the infringer enjoys a presumption that the anticipating

disclosure also enables the claimed invention.” *Impax Labs., Inc. v. Aventis Pharm., Inc.*, 545 F.3d 1312, 1316 (Fed Cir. 2008); *see also Amgen Inc. v. Hoechst Marion Roussell, Inc.*, 314 F.3d 1313, 1355 (Fed. Cir. 2003) (deciding an accused infringer is entitled to have the district court presume the enablement of material in a prior art patent). A patentee can overcome this presumption by showing the asserted prior art patent does not enable the claimed invention. *Id.*

Assuming the jury instructions were erroneous, Defendants are not entitled to a new trial. Under Fifth Circuit law, a party must show two requirements before the court grants a new trial based on an erroneous jury instruction. First, the party must demonstrate that “the charge as a whole creates substantial and ineradicable doubt whether the jury has been properly guided in its deliberations.” *Hartsell v. Dr. Pepper Bottling Co.*, 207 F.3d 269, 272 (5th Cir. 2000) (citation omitted). Second, even if the jury instructions were erroneous, the instruction must have affected the outcome of the case. *Id.* Defendants asserted two anticipatory prior art patents against the ’884 Patent, Johnson and Hashimoto. Defendants neither have demonstrated how the charge as a whole creates “substantial and ineradicable doubt” nor have shown how the Court’s error affected the outcome of the case. In fact, Plaintiff presented evidence that Johnson and Hashimoto do not disclose all of the claimed limitations of the ’884 Patent. This evidence alone could have led to the jury’s verdict of infringement rather than one of invalidity, meaning enablement may not have been a material issue for the jury. Thus, Defendants do not meet the Fifth Circuit’s high burden for a new trial, and the Court denies Defendants’ motion on this argument.

Defendants then argue the Court omitted an instruction on marking and notice under 35 U.S.C. § 287, which entitled them to a new trial on damages. District courts have considerable

latitude when crafting jury instructions. The refusal to give a requested instruction warrants a new trial if the instruction “1) was a substantially correct statement of law, 2) was not substantially covered in the charge as a whole, and 3) concerned an important point in the trial such that the failure to instruct the jury on the issue seriously impaired the [party’s] ability to present a given [claim].” *Kanida v. Gulf Coast Med. Pers. LP*, 363 F.3d 568, 578 (5th Cir. 2004) (alteration in original) (quotation marks omitted). Here, the requested instruction on marking and notice is irrelevant because the parties offered little or no evidence to warrant such an instruction. And even if the Court’s decision to exclude the requested instruction was erroneous, it would not rise to the level of reversible error as set out by the Fifth Circuit. *Hartsell*, 207 F.3d at 272 (outlining the requirements a party must meet before the court grants a new trial based on erroneous jury instructions).

Accordingly, the Court denies Defendants’ motion for a new trial based on the jury instructions.

CONCLUSION

It is therefore **ORDERED** that Defendants’ Rule 50(b) Motion for Judgment as a Matter of Law and/or Rule 59 Motion for a New Trial (Dkt. #337) is **DENIED**.

SIGNED this 27th day of April, 2017.


AMOS L. MAZZANT
UNITED STATES DISTRICT JUDGE